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General: The United States Environmental Protection Agency's (EPA's) November 1, 2007 letter regarding groundwater-related issues contained comments on the Intermediate (60%) Design Reports (Intermediate Design Reports) for the low-temperature thermal desorption (LTTD) and off-site disposal (OSD) soil remedies for the Fletcher's Paint Works and Storage Facility Superfund Site in Milford, New Hampshire. However, the substance upon which EPA commented in its November 1, 2007 letter was not presented in the Intermediate Design Reports for the Site. It was presented in the Environmental Monitoring Plan (EMP) and the Institutional Controls/Access Restrictions Plan (IC/AR Plan) that the General Electric Company (GE) was in the process of preparing when the Intermediate Design Reports were submitted to EPA on June 4 and 12, 2007. The EMP and IC/AR Plan were subsequently submitted to EPA on July 30, 2007, along with a revised Surface Water and Groundwater Monitoring Plan (also known as the Water Monitoring Plan [WMP]). The EMP provides specific details regarding the scope of the post-construction groundwater monitoring activities at the Site, and the IC/AR Plan provides details regarding access, access restrictions, and institutional controls during the construction and post-construction phases of the project. The institutional controls include the establishment of a Groundwater Management Zone (GMZ).

GE understands that EPA is still reviewing the revised WMP, the EMP, and the IC/AR Plan, all of which were submitted to EPA on July 30, 2007. In the meantime, GE is providing herein responses to the comments on these submittals that EPA provided in its November 1, 2007 letter.

With the exception of a few numbered comments, EPA's comments are embedded in the narrative of its November 1, 2007 letter. As a result, GE has included EPA's narrative in its entirety and inserted responses at several locations within the body of the narrative. EPA's comments are shown in italies.

Narrative of EPA's November 1, 2007 Letter

EPA approved with modification the Preliminary LTTD Design on April 5th, 2007. In a letter dated June 19, 2007 EPA concluded that "[t]he plans submitted to date by GE do not have the adequate data required to define the boundaries of the GMZ and complete the work intended in the ROD. Information is still needed at this site to establish the boundary limits of the contamination and identify all the properties which will ultimately be included as part of the GMZ and have institutional controls applied, as well as information relative to the bedrock fate and transport at the site, cleanup time frames, impact, if any on surface waters and a relatively new, potential issue at the site - vapor intrusion."

Response: GE assumes that EPA intended to reference its June 20, 2007 letter.

EPA issued GE a letter on May 25, 2007 (Ruthann Sherman, EPA to Jeffrey Porter, Mintz Levin) requiring as part of the 60% intermediate design package, that the substantive portions of a draft GMP application be submitted. EPA also clearly stated in its letter to GE that while New Hampshire uses the term "permit" in its regulations, it is actually a process that allows for the exceedances of groundwater, defined within an area known as the GMZ, to be addressed through remediation and monitoring, until such time as those exceedances no longer exist.

EPA acknowledged that the purpose of that draft document was to begin to determine whether the current data at the Site is sufficient to establish, support, and justify a Ground Water Management Zone, as well as to establish monitoring and reporting requirements and the assurance of protection to the public through institutional controls, until groundwater meets cleanup levels.

EPA's request was consistent with CERCLA, the NCP and EPA guidance. GE's own language in its 30% Design Submission (page 6-2, Nov. 2005 30% design) noted that a draft GMP application would be submitted to the EPA as part of the 60% intermediate design.

GE's May 15, 2007 letter referenced EPA's Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions (EPA's Permit Guidance), February 19, 1992. This guidance acknowledges EPA's discretion to use an equivalent permit process even if an actual permit is not issued, such as a GMP through NHDES for groundwater violations. EPA can determine whether or not the NH regulations are met by response actions at the site and may consult with the NH DES in such a review and determination. EPA has consulted with the NHDES to review whether GE's submissions represent an equivalent level of documentation needed to establish the justification and boundaries for the GMZ required at the site, the adequacy of those submissions in meeting the criteria for establishing the GMZ, as well as for monitoring, institutional controls and compliance. EPA in its determination that ARARs are being met by the response action will seek NHDES's opinion whether or not GE is meeting the requirements and performance standards established by the ROD. Should the NHDES indicate that certain documentation, typically reviewed to determine compliance with the GMZ regulations and other ARARs specified in the ROD are needed to assess compliance with the NH regulations, then EPA cannot determine that ARARs are being met by the response action through GE's equivalent level of documentation.

Response: GE's position regarding the application of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the National Contingency Plan (NCP) to New Hampshire's Groundwater Management Permit (GMP) program is presented in the May 15, 2007 letter to which EPA refers in its comment, as well as two July 30, 2007 letters, one from Ignacia Moreno of GE and the other from Jeffrey Porter of Mintz Levin, outside counsel to GE.

NH regulations provide the basis and specific information NHDES, and therefore EPA, need to determine the adequacy of GE's response to addressing the GMZ ARAR and the ability of the response action to meet performance standards. EPA explained this in our June 20, 2007 WMP letter by indicating the equivalent substantive documentation that should be submitted to present the justification and basis for the establishment of GMZ as well as the monitoring, IC's and compliance of the GMZ (in a manner not inconsistent with NH's Groundwater Management regulations). EPA explained the deficiencies in GE's proposed GMZ boundary which prevent the justification and support for boundary conditions and provided GE with the NH DES contact for compliance with NH's GMZ regulation.

Response: EPA's June 20, 2007 letter provided several comments on the GMZ proposed in the revised WMP that GE submitted on June 18, 2003, before GE had implemented the Pre-Design Work Plan (PD Work Plan) that was approved with modification by EPA in a November 5, 2003 letter. In its June 20, 2007 letter, EPA stated:

"GE's proposed GMZ boundary is actually a 'plume' map and does not adequately represent a GMZ boundary delineation. The GMP compliance criteria state that there shall be no violation of groundwater at or beyond the boundary of the GMZ. The proposed GMZ boundary is not clearly defined or supported by groundwater data or property lines. The GMZ boundary is typically determined through a pair of wells, one which is within the boundary (exceeds MCLs) and one which is outside the boundary (does not exceed MCLs) - marking the edge of contamination, or it is a property line or a physical feature, where specific data is known relative to that property. Where there is not a sufficient amount of groundwater data to determine the edge of the contamination, property lines are used to define the boundary, and the entire property becomes part of the GMZ."

¹ GE submitted the original WMP to EPA on January 21, 2002. A revised WMP was submitted to EPA on June 18, 2003 and addressed comments provided in EPA's May 1, 2003 letter.

EPA's June 20, 2007 letter went on to indicate areas where additional monitoring wells should be installed to further delineate the extent of groundwater impacted by constituents from the Site.

GE responded to EPA's request for additional monitoring wells with a July 30, 2007 proposal to install five new monitoring wells in areas identified by EPA.

Consistent with EPA's June 20, 2007 comments, the proposed GMZ was expanded by using property lines and/or easily identifiable physical features to define its boundaries. These modifications of the boundaries of the GMZ were not only consistent with EPA's June 20, 2007 letter, but were also consistent with the applicable requirements of the New Hampshire Department of Environmental Services (NHDES) regulations specified in Mr. Porter's July 30, 2007 letter.

In a letter dated July 30, 2007, from Ignacia Moreno, GE to Ruthann Sherman, EPA, GE indicated that they will not comply with their own 30% design submission, as approved with comment by the EPA, or EPA's requirement for the submission of a draft GMP application as part of the 60% design package but rather that GE would indicate how it was complying with the substantive portions of the ARAR requirements for the Fletcher ROD through the submission of equivalent permit documentation. GE indicated that the documentation submitted in connection with the establishment and maintenance of the GMZ would include the following:

- 1) A timeframe evaluation for contaminants in groundwater to reach ICLs;
- 2) A partial response to EPA's June 20, 2007 WMP approval with modification relating to the establishment of the GMZ;
- 3) A proposal to install five wells in three locations in response to EPA's June 20, 2007 WMP approval with modification which noted deficiencies in data available to establish a GMZ boundary;
- 4) A revised WMP specifying the groundwater monitoring activities for the preconstruction phase;
- 5) An EMP specifying the monitoring requirements for the GMZ following the OU1 response action for the soils, until ICLs are met in groundwater in all of the monitoring wells in the GMZ;
- 6) An IC/AR plan specifying the basis for the establishment of the GMZ, and ICs associated with the GMZ;
- 7) Correspondence addressing NH Groundwater management regulations (July 30, 2007, Jeffrey Porter, Mintz Levin to Ruthann Sherman, EPA); and
- 8) GE's response to EPA's concerns related to potential vapor intrusion of TCE into nearby residences and businesses.

GE elected not to include the NHDES in copies of some of this documentation. To that end, GE appears to be neglecting the NHDES and their role in protecting their state's groundwater as potential drinking water, and EPA's authority to consult with a state in determination of whether state ARARs are being met by the response action.

Response: In his May 15, 2007 letter, Mr. Porter reiterated GE's previously-expressed position that CERCLA and the NCP preempted any attempt to require a GMP with respect to the Site. In that letter, GE requested that EPA suspend its deadline for submittal of a GMP application pending GE's demonstration of how the substantive requirements of the applicable or relevant and appropriate requirements (ARARs) relating to the establishment and maintenance of a GMZ would be met by the Operable Unit 1 (OU-1) response action. EPA's subsequent May 25, 2007 letter to GE reiterated EPA's demand that GE submit a draft GMP application as part of the intermediate design but also set a deadline of July 30, 2007 for submitting information related to the establishment of the GMZ. EPA's May 25, 2007 letter was followed by its aforementioned June 20, 2007 letter, which provided comments on the revised WMP previously submitted by GE on June 18, 2003.

In a July 13, 2007 letter, GE provided EPA with responses to some of the comments in EPA's June 20, 2007 letter. The remaining comments and other requests by EPA were addressed in GE's submittals on July 30, 2007.

GE disagrees that the July 30, 2007 submittal letter from Ms. Moreno indicated that GE "will not comply with their own 30% design submission, as approved with comment by the EPA, or EPA's requirement for the submission of a draft GMP application as part of the 60% design package." Rather, consistent with the May 15, 2007 letter from Mr. Porter, Ms. Moreno's letter provided a chronological summary and discussion of the previous documentation between GE and EPA related to establishment of the GMZ and provided a summary of eight documents submitted under cover of that letter to "complete GE's response to [EPA's] June 20, 2007 [c]orrespondence and demonstrate how the substantive requirements of the ARARs will be met in connection with the establishment and maintenance of the GMZ."

GE also disagrees with EPA's assertion that GE "appears to be neglecting the NHDES and their role in protecting their state's groundwater as potential drinking water." To the contrary, GE provided copies of all of the following technical documents to NHDES at the same time they were submitted to EPA:

- July 13, 2007 letter from Paul Hare providing a partial response to EPA's June 20, 2007 comments on the June 18, 2003 WMP;
- July 30, 2007 letter from Paul Hare providing another partial response to EPA's June 20, 2007 comments on the June 18, 2003 WMP, including an ARCADIS BBL letter dated July 27, 2007 proposing the installation of five new monitoring wells at the Site;
- July 30, 2007 letter from Paul Hare providing an ARCADIS BBL letter dated July 27, 2007 with estimates of groundwater cleanup timeframes, as requested by EPA;
- July 30, 2007 letter from Paul Hare providing the remaining response to EPA's June 20, 2007 comments on the June 18, 2003 WMP, and also providing a revised WMP; and
- July 30, 2007 letter from Paul Hare providing the EMP and the new IC/AR Plan for the construction and post-construction phases of the project.

The only documents that GE did not directly provide to NHDES were three July 30, 2007 letters from GE's inside and outside counsel regarding the legal positions of EPA and GE. GE notes below that EPA has agreed that two of these three letters are not "technical" documents to be addressed by EPA.

Finally, GE disagrees with EPA's assertion that GE "appears to be neglecting ... EPA's authority to consult with a state in determination of whether state ARARs are being met by the response action." GE recognizes EPA's authority to consult with NHDES, as specified in CERCLA and the NCP.

Notwithstanding all of EPA's concerns and issues related to GE's handling of the documentation supporting the attainment of ARARs at the site, EPA, after consultation with NHDES, has provided the comments below relative to the establishment of the GMZ. This letter is written to provide EPA's comment to Section 6 (GMZ) of the 60% OSD and LTTD Designs.

Response: As indicated above, EPA's November 1, 2007 letter regarding groundwater-related issues provides comments on GE's July 30, 2007 submittals, not the Intermediate Design Reports. Although Section 6 of the Intermediate Design Reports is titled "Groundwater Monitoring Zone," that section does not provide any of the substance upon which EPA commented in its November 1, 2007 letter. Section 6 simply references the EMP and the IC/AR Plan that GE was in the process of preparing when the Intermediate Design Reports were submitted to EPA on June 4 and 12, 2007.

EPA's response to GE's multiple, equivalent permit application submissions exceptions will be in a separate letter as 1) GE's correspondence (7&8) noted above from GE's outside council are not considered documentation that supports or justifies attainment of ARARs established by the ROD for the site, and therefore will not be addressed by EPA in this technical response and 2) the revised WMP and EMP are required submissions under the UAO, (UAO paragraphs 77 and 97) and are therefore subject to EPA approval procedures under the UAO. The original IC/AR plan was approved by the EPA as part of the Pre-Design Investigation Submissions. GE submitted a revision to this previously approved IC/AR plan to include access and other institutional controls related to the implementation of the GMZ. Because all of these plans are subject to EPA approval under the Order, EPA will address these documents in a separate letter to GE and not in EPA's comment to the 60% design submission.

Response: GE looks forward to EPA's review, comment, and approval of the July 30, 2007 submittals of the revised WMP, the EMP and the IC/AR Plan.

EPA's Comments on GE's July 30, 2007 Groundwater Cleanup Timeframe Estimates

The UAO SOW required, as part of the Pre-Design Investigations, an evaluation of the frames to achieve monitored natural attenuation of the groundwater. The WMP, is the document required to be submitted per the Order, which outlines the procedures to better understand and establish the baseline groundwater conditions at the site and is the only document under the Order which pertains to groundwater sampling, monitoring and evaluation activities that are to be on-going throughout the pre-design, remedial design and remedial action phases until EPA approves the EMP plan prior to the completion of the remedial action. Therefore the WMP represent an iterative process of evaluation of the groundwater conditions potentially spanning a 10 year time period. The UAO SOW and the ROD required an evaluation of the time for groundwater to reach ICLs following source control activities as part of pre-design investigations. As this was not included in the 2003 draft WMP, EPA reminded GE of this requirement under the SOW to the Order and required the evaluation as part of its June 19, 2007 approval with modification.

Response: In a July 30, 2007 submittal, GE provided EPA with a July 27, 2007 letter from ARCADIS BBL providing the estimates that EPA requested. Those estimates were similar to the estimates provided by EPA in its September 30, 1998 Record of Decision (ROD).

Because EPA did not approve with modifications the PD Work Plan for the pre-design investigation until November 5, 2003, the revised WMP submitted on June 18, 2003 did not include estimates of the groundwater cleanup timeframes. Until the pre-design investigation was performed, there were no new data upon which to perform such an evaluation, other than the data considered in connection with EPA's Record of Decision (ROD).

The WMP is not "an iterative process of evaluation of the groundwater conditions." Once approved or approved with modifications by EPA, the WMP must be implemented. It specifies the monitoring to occur during the pre-design and design phases of the OU-1 remedial action. GE began implementing the WMP in July 2007 upon receipt of the June 20, 2007 letter that EPA characterized as an "approval with modifications" of the WMP. The WMP requires that quarterly groundwater sampling and analysis be performed, and that the data from each monitoring event be evaluated to determine if any changes are warranted to the GMZ. Thus far, based on the validated results available for the July 2007 monitoring event, and the preliminary results available for the October 2007 monitoring event, no changes appear warranted to the GMZ presented in the revised WMP, the EMP, and the IC/AR Plan submitted to EPA on July 30, 2007.

GE submitted the EMP to EPA on July 30, 2007. The EMP specifies the monitoring during the post-construction phase of the remedial action. There is no reason to expect, as EPA suggests in this comment, that the WMP will continue to be implemented 10 years from now (e.g., July 2017). The soil remedy should have been completed and EPA should have approved or approved with modifications the EMP well before that time.

In the July 30, 2007 letter BBL uses a first order equation to estimate the timeframe needed to allow the concentrations found in the groundwater at the site in 2004 (the first round of data collected under the WMP) to achieve ICLs established by the ROD.

Response: ARCADIS BBL's letter was dated July 27, 2007. However, it was submitted to EPA by GE on July 30, 2007.

The calculations of the timeframes for meeting the ICLs, derived by BBL, were similar to those timeframes estimated in the 1998 ROD. Table 1 of the document presented the timeframes to achieve ICLS based on calculations using the mean degradation half-life and the maximum concentration found in 2004, the first sampling of groundwater performed by GE under the 2001 Order.

The maximum concentration for 1,2,4-trichlorobenzene in 2004 was in well MW21C at a concentration of 160 ug/l. According to table 1, the predicted timeframe for that compound to reach its ICL of 70 ug/l was 0.7 years (from February 2004). Since the February 2004 sampling round, GE has collected two additional rounds of groundwater samples. In August of 2007, the concentration of 1,2, 4- trichlorobenzene in MW-21C was 90 ug/l, indicating that the calculated timeframes may be close, but may underestimate the amount of time needed to reach ICLs in groundwater at the site.

Response: EPA's statements are accurate. However, it should be noted that the estimated groundwater cleanup timeframes presented in ARCADIS BBL's July 27, 2007 letter were developed based solely upon one round of groundwater monitoring data collected in February 2004 as part of the pre-design investigation.

The concentration of 1,2,4-trichlorobenzene (1,2,4-TCB) at monitoring well MW-21C during the July 2007 sampling event was not available at the time of ARCADIS BBL's estimates. Based on this result, GE agrees that the estimated cleanup timeframe for 1,2,4-TCB is likely to be close to the actual cleanup timeframe to reach the 70 parts per billion (ppb) interim cleanup level (ICL). In that regard, the preliminary results for the October 2007 sampling event show 1,2,4-TCB at monitoring well MW-21C to be 55B ppb.²

It is important to note that 1,2,4-TCB was not predicted to be the last constituent to reach the ICLs. For both the overburden and the bedrock, at both the Elm Street Area and the Mill Street Area, the groundwater cleanup timeframe estimates were highest for polychlorinated biphenyls (PCBs). The actual groundwater cleanup timeframes for the detected constituents in groundwater to achieve the ICLs specified in the ROD will be empirically demonstrated based on post-construction groundwater monitoring results.

The discovery, but failure to collect DNAPL in 2004, prompted a revised collection method, approved with comment in EPA's 2007 approval of the WMP. With this revised method, a DNAPL sample was collected and analyzed from the July 2007 sampling at monitoring well location MW-21C. GE reported that that the DNAPL in the shallow bedrock contains many compounds including 960 ppm TCB, 190 ppm TCB and 68,000 ppm PCB. As you know, DNAPL acts a source of continuous contamination as the DNAPL compounds dissolved slowly into the groundwater. The timeframe memorandum does not address the results of the DNAPL found at the site, nor the impact on the groundwater cleanup timeframes in light of this new, additional source to ongoing groundwater contamination. Given the high concentrations found in the DNAPL, the slow dissolution of these compounds into the groundwater and ultimately the length of time for these compounds to either reach the river, where groundwater from the site ultimately discharges, or reach ICLs, it would appear that groundwater timeframes presented by the memorandum can only be viewed as minimum timeframe estimates to reach ICLs established by the ROD for this site.

Response: A small amount of dense non-aqueous phase liquid (DNAPL) was indeed collected from monitoring well MW-21C during the July 2007 sampling event. The amount of DNAPL collected was sufficient for analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and PCBs. The observance of DNAPL at monitoring well MW-21C, which is a shallow bedrock well located in the center of the Mill Street Area, was not a surprise and does not constitute new information; the occurrence of DNAPL in the shallow bedrock at the Mill Street Area has been suspected for over a decade. It is also worth noting that an insufficient amount of DNAPL (i.e., only several droplets) was recovered from monitoring well MW-21C during the October 2007 sampling event to analyze.

GE disagrees with any suggestion implicit in EPA's comment that ARCADIS BBL (formerly Blasland, Bouck & Lee, Inc. [BBL]) did not act to obtain a sample of DNAPL during the pre-design investigation in early 2004. DNAPL was not observed at monitoring well MW-21C during well inspections conducted in July 2003, as reported in a letter from GE to EPA dated November 4, 2003. Prior to well development on January 21, 2004, an oil/water interface probe was used to determine the potential presence of DNAPL in monitoring well MW-21C. Measurable quantities of DNAPL were not detected at this well by the interface probe, or upon removal of the interface probe from the monitoring well. A bailer was then used to confirm that no sediment was present at the bottom of the well. Trace droplets of DNAPL were observed on the tip of the bailer upon retrieval from the monitoring well. Well development activities were discontinued at that time and the presence of DNAPL was reported to EPA. In accordance with EPA approval, a bailer was used to collect a sample of sediment, DNAPL, and water mixture from the bottom of the well prior to continuing with well development at monitoring well MW-21C on January 29, 2004. As reported in the meeting minutes for January 29, 2004, the sample collected exhibited a sheen and was submitted for PCB, VOC, and SVOC

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² The "B" flag indicates that 1,2,4-TCB was detected in the trip and/or method blank, and that the concentration reported in the sample is less than five times that reported in the blank(s). Regardless, it is clear that the reported concentration for 1,2,4-TCB was less than the 70 ppb ICL.

analyses. The well was then developed and specific capacity data collected in accordance with the requirements of PD Work Plan. In summary, there was insufficient quantity of DNAPL in monitoring well MW-21C for DNAPL sample collection and analysis during that monitoring event.

At meetings on April 22 and 29, 2004, EPA, GE, and ARCADIS BBL representatives discussed potential methods to obtain a DNAPL sample from monitoring well MW-21C, and EPA requested that GE develop a revised DNAPL sampling procedure. However, at the request of EPA, no additional activities were conducted to obtain a DNAPL sample during the April 2004 monthly groundwater elevation monitoring event. In response to EPA's request for a revised DNAPL sample collection procedure, ARCADIS BBL provided a revised procedure via electronic mail on June 2, 2004. EPA provided comments on the proposed procedure on June 20, 2007 and GE included the revised procedure in a revised version of Appendix H of the Field Sampling Plan, which is Volume 2 of the Sampling and Analysis Plan included as part of the Project Operations Plan.

As previously indicated, the groundwater cleanup timeframe estimates presented in ARCADIS BBL's July 27, 2007 letter were developed as general estimates, and the actual cleanup timeframes will be empirically demonstrated based on post-construction groundwater sampling under the EMP. Nevertheless, as EPA points out in a previous comment, the concentration of dissolved 1,2,4-TCB in overburden groundwater at monitoring well MW-21C declined by nearly 50 percent between the February 2004 and July 2007 sampling events, despite the presence of DNAPL at that well. In addition, the other two compounds (total PCBs and trichloroethene [TCE]) that were above their ICLs at monitoring well MW-21C also declined between the February 2004 and July 2007 sampling events, at rates equal to or greater than those predicted in ARCADIS BBL's July 27, 2007 letter. It is possible given the small amount of DNAPL that has been recovered from monitoring well MW-21C that the long-term influence of DNAPL in the shallow bedrock at the Mill Street Area will not be significant as EPA's implies. This inference appears to be supported by the observed decline in dissolved phase concentrations of constituents in groundwater at this and other wells, despite the presence of some DNAPL. Finally, implementation of the OU-1 soil remedy at the Mill Street Area should facilitate the natural attenuation of constituents in groundwater.

EPA's Comments on GE's Proposed GMZ Boundary

Specifically: Proposed GMZ Boundary justification

The NH regulations require that there shall be no violation of groundwater outside the boundary of the GMZ. NH Regulations indicate the criteria for establishing the GMZ boundaries. EPA has reviewed GE's response to the EPA's June 20, 2007 comments relative to establishment of the GMZ boundaries at the site and, after consultation with NHDES, offer the following:

The GMZ criteria typically are established through evaluation of groundwater data and boundaries are thus surveyed in, unless a boundary is defined by a physical feature or coincides with a property line.

Response: The GMZ proposed by GE in the IC/AR Plan submitted on July 30, 2007 was developed to include all known and suspected groundwater quality impacts associated with the Site based on a review of the available data, and also to include a reasonable buffer zone within which groundwater withdrawals should not be allowed. The boundaries are based on clearly identifiable physical features (such as the center lines of roads) and property lines. This GMZ will ensure that there is no exceedance of the established ICLs outside the GMZ relating to the Site. By way of comparison, GE notes groundwater sampling associated with the Snack Corner Mobil gasoline station at 24 Elm Street, directly south of the Elm Street Area, indicates that the gas station is a source of aromatic hydrocarbons detected in overburden groundwater in the vicinity of the Site.

However, despite the fact that aromatic hydrocarbons were detected in wells installed off the Snack Corner Mobil property (i.e., on the north side of Elm Street) by the owner of the gas station, NHDES records indicate that the GMZ relating to the Snack Corner Mobil gasoline station includes only the Snack Corner Mobil property.

EPA Comment 1: GE's proposed boundary for the GMZ is much larger and more inclusive of large parcels of land than is warranted for establishment of the GMZ. Where EPA determined a lack of adequate data existed to establish or define a boundary, GE included entire parcels of property, rather than proposing the installation and monitoring of groundwater to establish boundary conditions. GE's response to comments indicate that rather than obtain the necessary data to justify the boundary conditions, GE sought to expand the boundary to include enough property to account for potential contamination transport and attenuation. GE's method never truly establishes boundary conditions using data that would demonstrate that contamination is not migrating to or beyond the boundaries of the GMZ.

EPA noted that there is no available bedrock data in the vicinity of MW 9. GE expanded the boundary of the GMZ out 180 feet, rather than propose the installation of a bedrock well at this location to monitor bedrock contamination in the direction of migration. EPA and NHDES believe a bedrock well in this location is justified as GE's October 15, 2007 Monitoring Report indicates that the groundwater flowpath in bedrock is, in part, moving across Mill Street in the direction of MW9. Groundwater contamination from MW-21 C, the most contaminated well at the site, where DNAPL has been found is the closest bedrock well upgradient of the MW-09 location.

In a similar instance, GE uses an expanded GMZ to include numerous acres of both the Keyes Field (25-133) and the Mill Pond property (25-95). The intent of the GMZ under NH's Groundwater Management Policy is not to include such a large area within the GMZ as to render monitoring of the boundaries useless, but to be able to define and monitor the groundwater contamination such that groundwater contamination does not migrate beyond the boundaries. Expanding the GMZ to include large parcels also unfairly burdens the property owner, especially if groundwater contamination is not throughout the entire property. The groundwater data and groundwater flow paths do not justify including these two large parcels within the GMZ and further the installation of additional wells would establish "clean" boundary conditions to be monitored in the future. Groundwater data from the Keyes Field was collected in 2007 and provided to GE. This data indicates no exceedances of ICLs in groundwater in the Keyes Field monitoring wells. A monitoring well series located in the groundwater flowpath along the eastern edge of Keyes Field would allow the GMZ to include only the eastern-most portion of the Keyes Field.

Response: GE first proposed a GMZ in the original WMP submitted on January 21, 2002. The boundaries of that GMZ were generally defined by including all wells that contained exceedances of the ROD-specified ICLs. EPA provided comments on the original WMP on May 1, 2003, and GE submitted a revised WMP on June 18, 2003. The GMZ proposed in the revised WMP was the same as in the GMZ proposed in the original WMP. EPA submitted comments on the revised WMP in a letter to GE dated June 20, 2007. Those comments stated "the boundaries of the GMZ shall be clearly denoted by clearly identifiable physical features ... unless the boundaries coincide with existing property lines." In the IC/AR Plan submitted on July 30, 2007, GE modified the proposed GMZ based on EPA's comments.

In its November 1, 2007 letter, EPA suggests that additional data, not "clearly identifiable physical features" or "existing property lines" are required. This contradicts EPA's June 20, 2007 letter, which stated that "[w]here there is not a sufficient amount of groundwater data to determine the edge of the contamination, property lines are used to define the boundary, and the entire property becomes part of the GMZ." This is also inconsistent with the ARARs identified by GE as evidenced by other GMZs in the vicinity of the Site. For example, the proposed GMZ associated with the Milford Xtra Mart included a 1,000-foot radius downgradient of the gasoline station, which cut across only a portion of parcel 25-133 (i.e., Keyes Field). The entire parcel

25-133 was included in the GMP issued by NHDES for that site. Two other properties located on the north side of Elm Street are also included in the GMZ for the Milford Xtra Mart site even though no monitoring wells have been installed on either of those properties.

The revised boundaries of the GMZ presented in the IC/AR Plan were developed to ensure that groundwater impacted by constituents from the Site does not migrate outside the boundaries of the GMZ. Therefore, the GMZ includes: 1) all properties at which groundwater data indicated exceedences of the ICLs; 2) properties located between monitoring wells that are included in the GMZ (to avoid discontinuities and/or gaps in the GMZ); 3) a reasonable buffer zone to ensure groundwater withdrawals would not influence the extent of constituents in groundwater from the Site; and 4) entire properties.

GE does not agree that including large parcels in their entirety in the GMZ "unfairly burdens the property owner." The Town of Milford owns parcel 25-133 (i.e., Keyes Field), and is subject to a Consent Decree regarding its responsibility relating to the Site. Parcel 25-133 is also already included in the GMZ associated with the Milford Xtra Mart. As previously indicated, Parcel 25-95 was included in the proposed GMZ because the groundwater monitoring results for monitoring well cluster MW-10 showed exceedences of certain ICLs during the February 2004 sampling event and also the more recent sampling events. Public water is available to parcels 25-95 and 25-133. Use of property lines as the boundaries of GMZs is entirely consistent with NHDES' groundwater regulations, and there are no other easily identifiable features that are located on these two properties that could be used as appropriate GMZ boundaries.

Finally, regarding the GMZ boundary in the vicinity of cluster MW-09, EPA's assertion that GE elected to expand the GMZ boundary 180 feet to the west in lieu of proposing a bedrock monitoring well at that cluster is not accurate. At least one and possibly both of the MW-09 overburden monitoring wells will be destroyed during implementation of the OU-1 soil remedy. As a result, installation of a bedrock monitoring well prior to performance of the remedy is not appropriate. The lack of a bedrock monitoring well at the MW-09 cluster did not impact the identification of the western boundary of the GMZ in this area, especially when considering that an exceedence of the manganese ICL was observed in monitoring well MW-09B during the February 2004 monitoring event. Further, parcels 25-109 and 25-110 were appropriately included in the GMZ due to the fact that exceedences of certain ICLs were observed at the MW-10 and MW-11 clusters during the February 2004 monitoring event. Both of these clusters are located west of the MW-09 cluster. As a result, it is reasonable to include these two properties since they are located directly within the groundwater flow path between the MW-10 and MW-11 clusters. In addition, institutional controls for land use and access to subsurface soils are needed for the property on which the MW-09 cluster is located.

Notwithstanding the above, GE proposes to install a bedrock monitoring well at cluster MW-09 when the OU-1 soil remedy is completed. This well, designated MW-09C, would be installed at the same time that overburden wells MW-09A and MW-09B are replaced. GE also proposes to install a new shallow bedrock monitoring well, designated MW-31C, in Keyes Field. GE proposes to install this well concurrent with the installation of monitoring wells MW-09C and MW-26C. The locations of these two new bedrock wells are illustrated on revised Figures 6 and 7 of the EMP, WMP, and IC/AR Plan, all of which are attached hereto.

* * * * *

EPA Comment 2: The installation of MW11C is acceptable to monitor the bedrock contamination and establish justification for the GMZ boundary in that vicinity.

<u>Response</u>: No response is necessary. However, with respect to schedule, GE will install monitoring well MW-11C concurrent with the installation of monitoring wells MW-30A, MW-30B, and MW-30C and after access has been obtained from the various property owners to perform this work. These new monitoring wells will be included in the quarterly groundwater sampling performed under the WMP after they have been installed and developed.

PA Comment 3: The installation of the proposed MW 30. A. R and C wells are

EPA Comment 3: The installation of the proposed MW 30, A, B and C wells are acceptable to monitor and potentially establish boundary conditions for groundwater migrating from the Mill Street Site, through MW 24 towards the river.

Response: No response is necessary. However, with respect to schedule, GE will install monitoring wells MW-30A, MW-30B, and MW-30C concurrent with the installation of monitoring well MW-11C and after access has been obtained from the various property owners to perform this work. These new monitoring wells will be included in the quarterly groundwater sampling performed under the WMP after they have been installed and developed.

* * * * *

EPA Comment 4: Please provide the justification for the inclusion of parcels 25-88, 25-85, 25-84 and 25-77 within the GMZ.

Response: Parcels 25-77, 25-84, 25-85, and 25-88 are located between monitoring well cluster MW-25 and proposed monitoring well cluster MW-30. Cluster MW-25 has exhibited exceedences of certain ICLs. The MW-30 cluster was proposed at the request of EPA to help define the eastern boundary of groundwater impacted by constituents from the Site. As previously discussed in GE's responses to EPA's June 20, 2007 comments, it is also important for the GMZ to include a reasonable buffer zone outside of the area of impacted groundwater. This is necessary to prevent groundwater withdrawals near the area of impacted groundwater that could alter (i.e., expand) the extent of the impacted groundwater. Including a reasonable buffer helps to ensure the protectiveness of the groundwater remedy. Including parcels 25-77, 25-84, 25-85, and 25-88 also avoids any discontinuities and/or gaps along the eastern boundary of the GMZ.

* * * * *

EPA Comment 5: Please provide the justification for the inclusion of the Elm Street cemetery (parcel 25-13) in the GMZ.

Response: The cemetery (i.e., parcel 25-13) is located immediately east of the Elm Street Area, where groundwater is known to be impacted. As stated in GE's response to EPA Comment 4 above, it is important for the GMZ to include a reasonable buffer zone outside of the area of impacted groundwater. This is necessary to prevent groundwater withdrawals near the area of impacted groundwater that could alter (i.e., expand) the extent of the impacted groundwater. Including a reasonable buffer helps to ensure the protectiveness of the groundwater remedy. Including Parcel 25-13 also helps avoid any discontinuities and/or gaps along the eastern boundary of the GMZ. It is also worth noting that monitoring well MW-28B contained total PCBs above its corresponding ICL during the July and October 2007 monitoring events. This well is located directly south and hydraulically upgradient of the cemetery.

* * * * *

EPA Comment 6: The installation of MW26 C, after the remedial action is an acceptable proposal to monitor groundwater conditions prior to discharge in the Souhegan River.

Response: No response is necessary.

* * * * *

EPA Comment 7: The GMZ boundary is proposed as the southern edge of river on the basis that data collected during the RI in the early 1990's met water quality criteria. According to the data at the site, groundwater contamination appears to have migrated toward and discharges into the Souhegan River. Groundwater contamination near the river exceeds ICLs. Bedrock contamination may be migrating between the sites to the river, especially in light of DNAPL contamination found in the bedrock which may provide a long-term source of contamination. In addition, property lines along a river typically extend to the center of the river and therefore GMZ boundaries typically extend to the center of a river.

Response: As directed by EPA, the northern boundary of the GMZ presented in the IC/AR Plan has been modified to be the midline of the Souhegan River in the vicinity of the Elm Street Area and Keyes Field. Accordingly, Figure 7 of the IC/AR Plan submitted on July 30, 2007 has been revised and is attached. Figure 7 of the WMP and Figure 7 of the EMP have also been revised and are attached; these two documents were also submitted on July 30, 2007. Despite this revision to the GMZ boundary, the surface water and sediment in the Souhegan River are part of Operable Unit 2 (OU-2).

GE has not seen a map of the GMZ associated with the Milford Xtra Mart gasoline station that extends out into the Souhegan River. However, per the Groundwater Management Permit (GMP) issued by NHDES for that site, the GMZ does include parcel 25-133 (i.e., Keyes Field). Based on EPA's comment, Figure 6 of the IC/AR Plan submitted on July 30, 2007 has been revised to show the GMZ for the Milford Xtra Mart gasoline station extending outward to the midline of the river. This revised figure is attached.

Attachments:

Revised Figures 6 and 7 of the IC/AR Plan dated July 30, 2007; Revised Figures 6 and 7 of the revised WMP dated July 30, 2007; and Revised Figures 6 and 7 of the EMP dated July 30, 2007. ARCADIS BBL

Attachments

ARCADIS BBL

Revised Figures 6 and 7 of the IC/AR Plan dated July 30, 2007





MONITORING WELL

PROPOSED MONITORING WELL

MO1

- BASE MAP FEATURES (PROPERTY LINES, ROADS, AND RALROAD) BASED ON TAX MAP NUMBER 25 FROM MERDIAN LAND SERVICES, INC. DATED APRIL 1998.
- BASE MAP FEATURES (BUILDINGS, RIVER) BASED ON PLATE 1 AND PLATE 2 FROM THE REMEDIAL INVESTIGATION REPORT (ARTHUR D. LITTLE, 1994).
- ALL LOCATIONS AN APPROXIMATE.



GENERAL ELECTRIC COMPANY
FLETCHER'S PAINT WORKS AND STORAGE FACELTY
SUPERFLIND SITE - MUFORD, NEW HAMPSHIRE
INSTITUTIONAL CONTROLS AND ACCESS
RESTRICTIONS PLAN

GROUNDWATER MANAGEMENT ZONES
ASSOCIATED WITH OTHER SITES



FIGURE

6

KEYES PARK MW-CEARC P/0 21-23 25-1 25-5 25-130 25-14 25-131 25-21 25-132 25-20 COLUMBUS 25-125 25-61/ 25-58 23-57 25-108 DFFICE BUILDING 25-56 25-106 25-102-1/ 25-101 MILL STREET-25-96

LEGEND:

WATER

-HHHHHH RALROA

---- PROPERTY LINES

PROPOSED GROUNDWATER
MANAGEMENT ZONE

MONITORING WELL

PROPOSED MONITORING WELL

A CONTRACTOR OF THE PARTY OF TH	- MLFORD, NEW HAMPSHIRE
Ton Persel	Breef Address
17-1	63 Dec Bireel
	8) De Street
28-10	67 Dm Stynei
25-17	81 Elm Street
25-11-1	0 Drs. Street
29-17	39 Din Street
	O Dry Street
25-63	32 Em Street
25-64	O Caritage Street
15-47	10 Outlage Street
35-66	12 Ortioga Street
26-67	V9 Sergen Street
25-67	23 Surper Street
16.16	22 Cattonia Stree
38-77	O Costope Street
25-64	0 Cottage Street 30 Cottage Street
25-85	12 Aut Street
10.00	36 Cettage Stree
25-64	4) Gettage Stree
25-90	39 College Stree
25-61	37 College Street
3-0	37 Callage Stree 33 Callage Stree
12.5	- 26 SIGNAL SELEC
	AT. 3733945 2733
	8 MB Street
25-55	30 MM Street
B-19	19 MS Street
	3 MN Street
25-111	O MN Street
26-112	21 Cettage Stree
25-113	15 Cettage Stree
	16 Gettage Stree
35-118	7. Californ Street
25-118	36 Chr. Street
25-117	42 Dim Wyset
25-118	44 Dim Street
25-118	1 Hampahire Drive
25-120	50 Dm Street
8-12	34 Dn Sirest
26-123	58 Cm Street
25-124	82 Cm Street
25-124 26-13)	Rayes Field

NOTES:

- BASE MAP FEATURES (PROPERTY LINES, ROADS, AND RASIROAD) BASED ON TAX MAP MUMBER 25 FROM MERCHAN LAND SERVICES, INC. DATED APRIL 1999.
- BASE MAP FEATURES (BULDINGS, RIVER) BASED ON PLATE 1 AND PLATE 2 FROM THE REMEDIAL INVESTIGATION REPORT (ARTHUR D. LITTLE, 1994).
- 3 ALL LOCATIONS ARE APPROXIMATE.



GENERAL ELECTRIC COMPANY
FLETCHER'S PAINT WORKS AND STORAGE FACULTY
SUPERFUND SITE - MILPORD, NEW HAMPSHIRE
INSTITUTIONAL CONTROLS AND ACCESS
RESTRICTIONS PLAN

PROPOSED GROUNDWATER MANAGEMENT ZONE



FIGURE

7

ARCADIS BBL

Revised Figures 6 and 7 of the EMP dated July 30, 2007

GRAPHIC SCALE



Ton Partiel	Street Address
15-6	62 Em Street
25-8-1	#1 Flor Street
25-10	57 Em Birest
35-11	St Con Street
25-11-1	8 Ein Street
3613	39 Dm Street
25-13	O Elm Street
25-63	32 Dm Street
56.47	0 Gettage Stree
25-61	10 College Sire
25-84	13 Cattoga Stra
217	19 Gorden Stree
25-69	13 Gordan Street
36.36	22 Cottage Stre
25-77	2 Cottage Stree
25-64	30 Cuttage Stre
33-14 33-10	12 Apr. Direct
25-86	36 Celtage Size
25-65	41 College Sive
25-80	38 College Stre
25-10 25-11	37 Cettage Stre
25-32	33 Cettage Stre
25-83	26 Certage Stre
25-84	E MR Street
25-14 25-16 35-16	30 MH Street
28-104	10 will Street
25-150 25-151	D MIN Street
25-111	D WE Street
35-171 35-173	Il Cetter fire
28-113	18 Cettoge Stre
25-154	15 Certioge Stre
35-118	7 Cottage Stree
35-116	38 Dim Street
25-117	42 Em Street
25-116	48 Eim Skreet
25-119	1 mampetire Ori
35-198	50 Cm Street
25-122	54 Em Street
28-123	58 Dire Street
38-133 28-134	82 Ein Street
38-133	Keyes Fleid

- BASE MAP FEATURES (PROPERTY LINES, ROADS, AND RALEGAD) BASED ON TAX MAP MUMBER 25 FROM MERDIAN LAND SERVICES, INC. DATED APRIL 1999.
- BASE MAP FEATURES (BUILDINGS, RIVER) BASED ON PLATE 1 AND PLATE 2 FROM THE REMEDIAL INVESTIGATION REPORT (ARTHUR D. LITTLE, 1994).



FOR EPA REVIEW

FLETCHER'S PAINT WORKS AND STORAGE FACILITY SUPERFUND SITE - MILPORD, NEW HAMPSHERE

SURFACE WATER AND GROUNDWATER MONITORING PLAN

PROPOSED GROUNDWATER MANAGEMENT ZONE

FIGURE

ARCADIS BBL

Revised Figures 6 and 7 of the revised WMP dated July 30, 2007

LEGEND:

PROPOSED MONITORING WELL

MONITORING WELL LOCATION

MILL STREET PROPERTY BOUNDARY

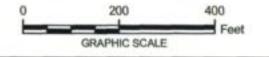
ELM STREET PROPERTY BOUNDARY

GAS STATION PROPERTY BOUNDARY

DRAFT FOR EPA REVIEW

NOTE:

 MONITORING WELL LOCATIONS KW-3D, KW-1S/D, OW-2/2P, MW-06A, MW-06B, MW-06C, NHDES-01, NHDES-02, R-1, KEYES WELL, AND PROPOSED WELL LOCATIONS WERE APPROXIMATED. ALL OTHER MONITORING WELL LOCATIONS WERE PLOTTED FROM SURVEYED COORDINATES.

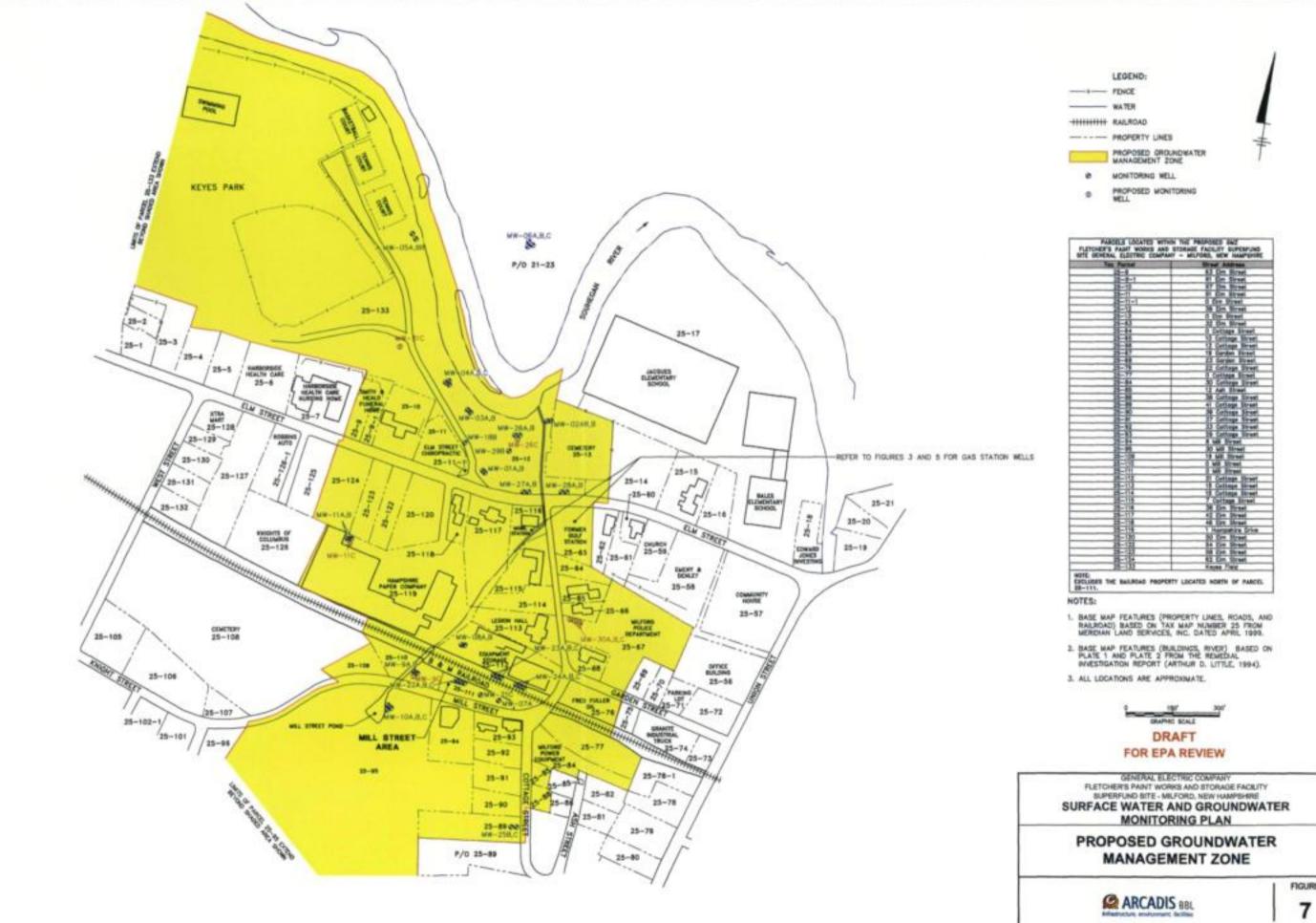


GENERAL ELECTRIC COMPANY
FLETCHER'S PAINT WORKS AND STORAGE FACILITY
SUPERFUND SITE - OU-1 - MILFORD, NEW HAMPSHIRE
SURFACE WATER AND GROUNDWATER
MONITORING PLAN

MONITORING WELL LOCATIONS



FIGURE 6



FIGURE